

FIG.1

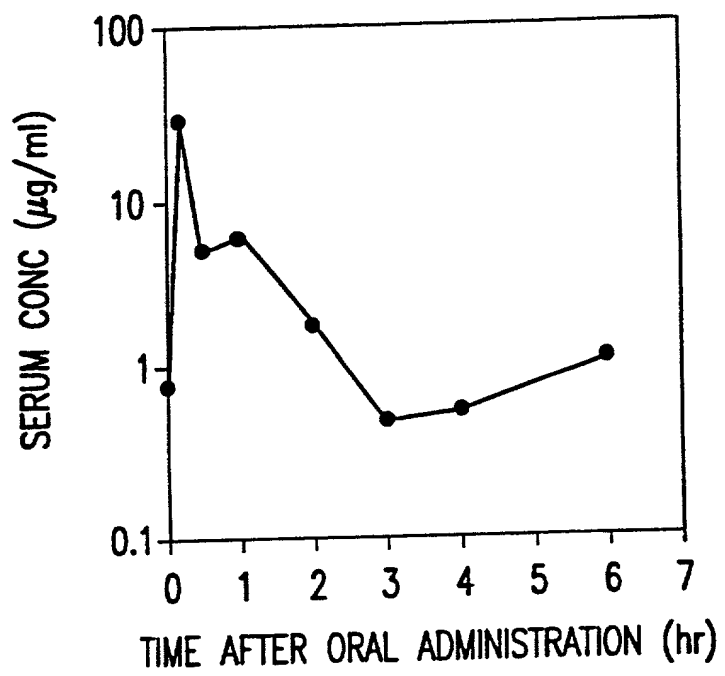
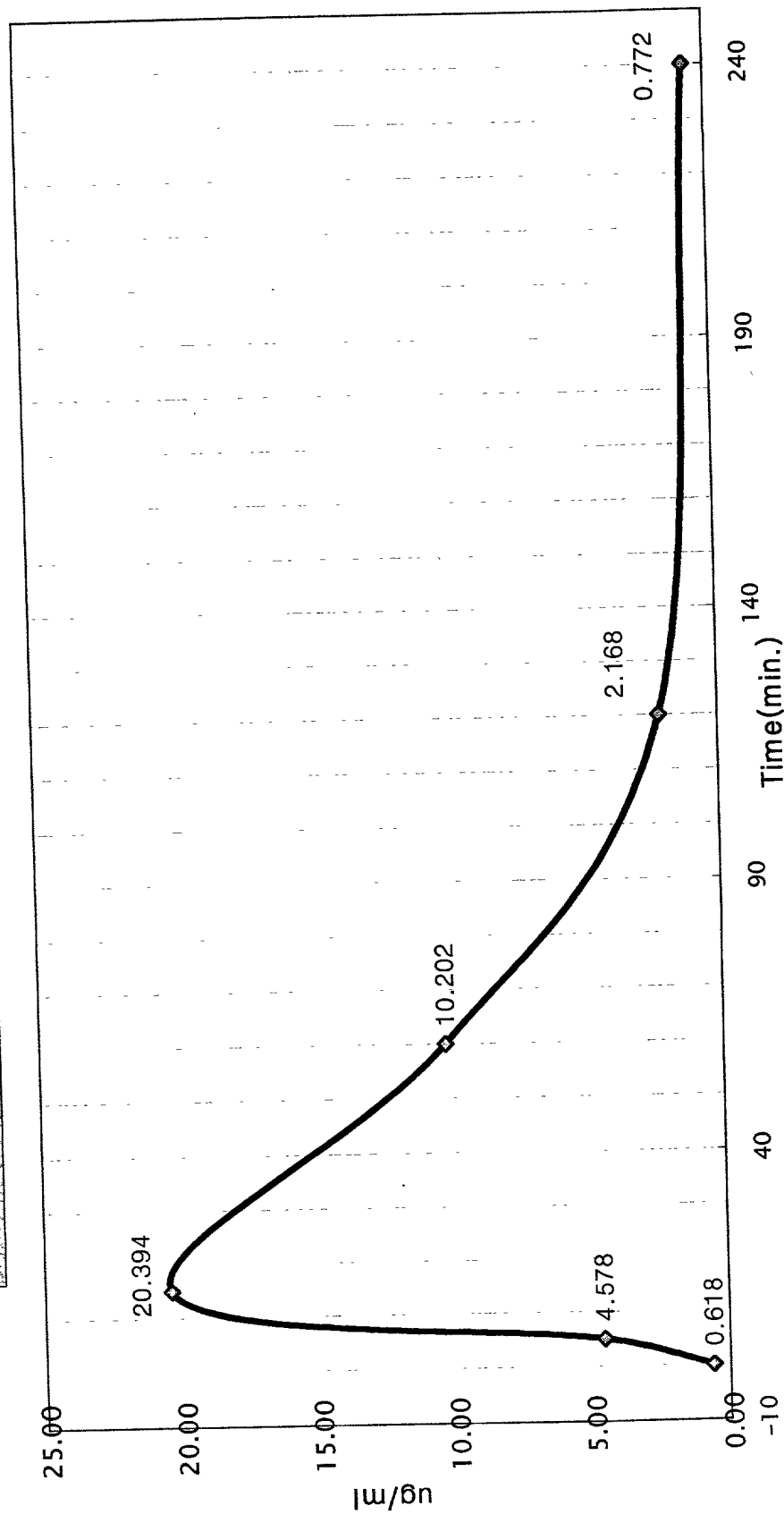


FIG.2

Figure. 3

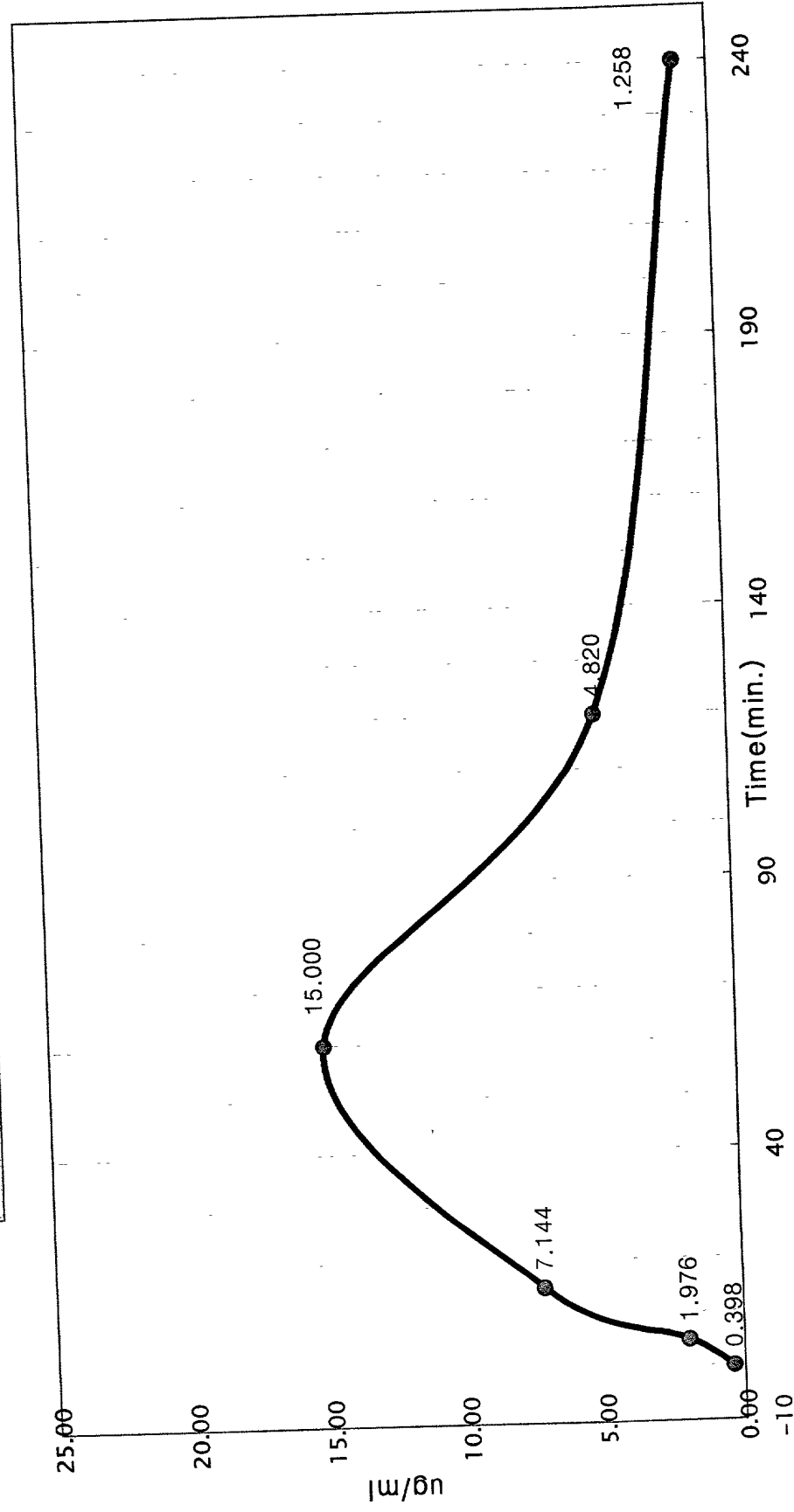
Pharmacokinetic parameters of UDCA in human
After an oral administration of liquid formulation of UDCA
Diagram of the mean (n=5) for Group I
Group I: Dose 600 mg as solution



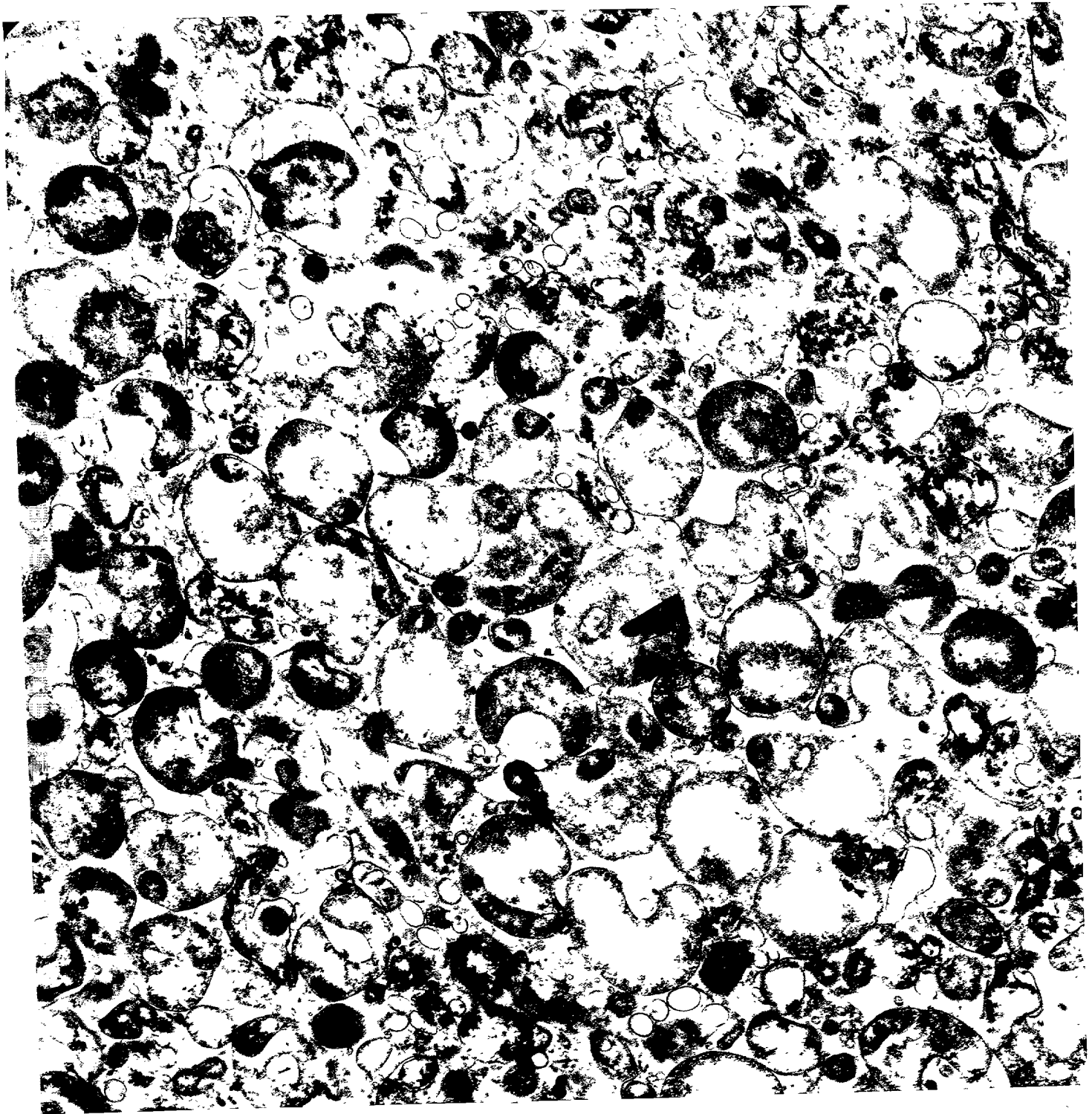
* Each bile acid was detected with standard procedure by LC-1500 Series HPLC System of Jasco equipped with 3 α -HSD(3 α -hydroxysteroid dehydrogenase) column

Figure. 4

Pharmacokinetic parameters of UDCA in human
After an oral administration of liquid formulation of UDCA
Diagram of the mean ($n=5$) for Group II
Group II: Dose 600 mg as syrup



※ Each bile acid was detected with standard procedure by LC-1500 Series HPLC System
of JASCO equipped with 3 α -HSD(3 α -hydroxysteroid dehydrogenase) column



H. pylori cultured from Columbia medium pictured by
Transmission Electron Microscope

Figure 5A



48hrs, after H. pylori treated with UDCA & bismuth citrate
pictured by Transmission Electron Microscope

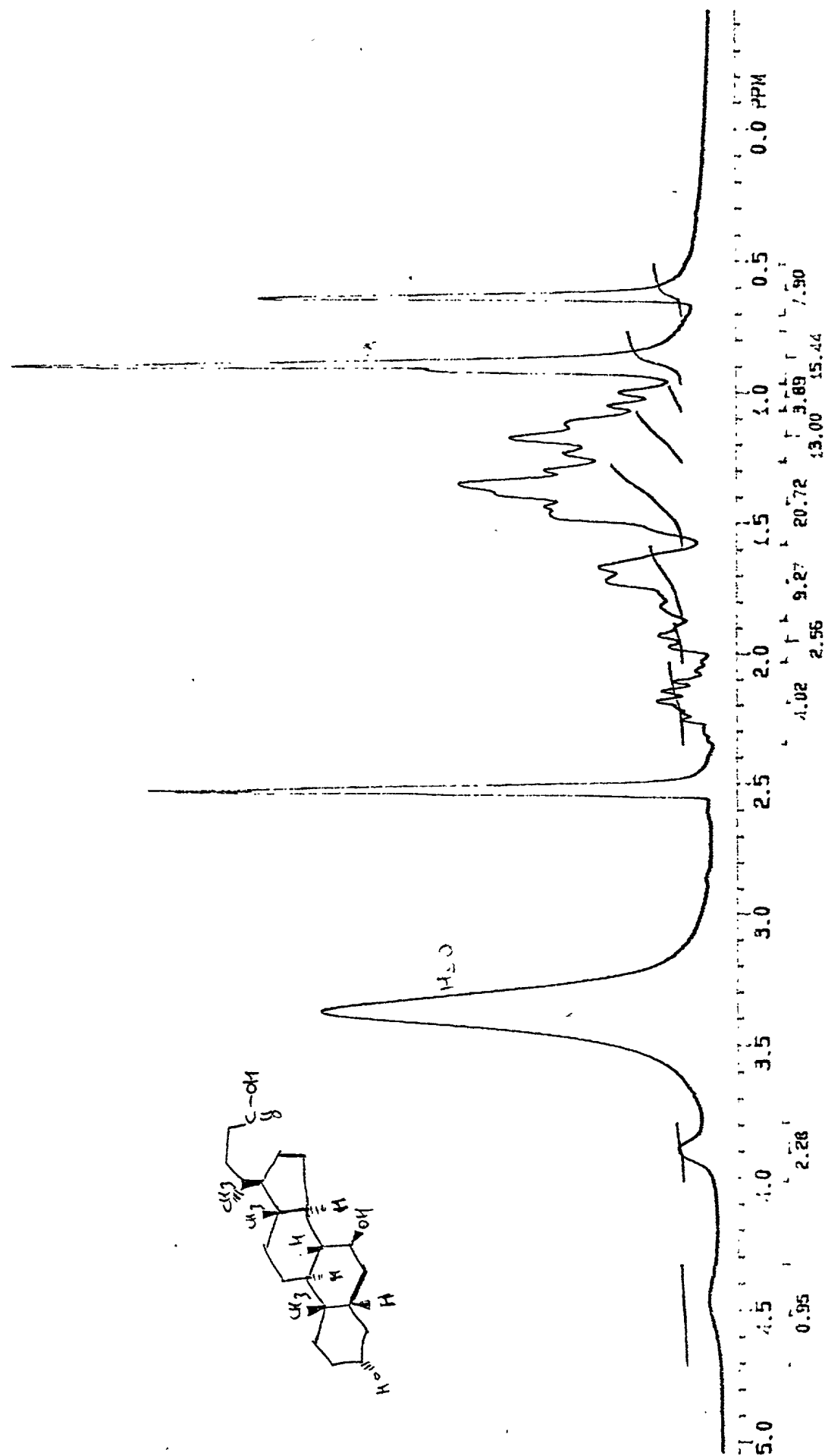
Figure 5B



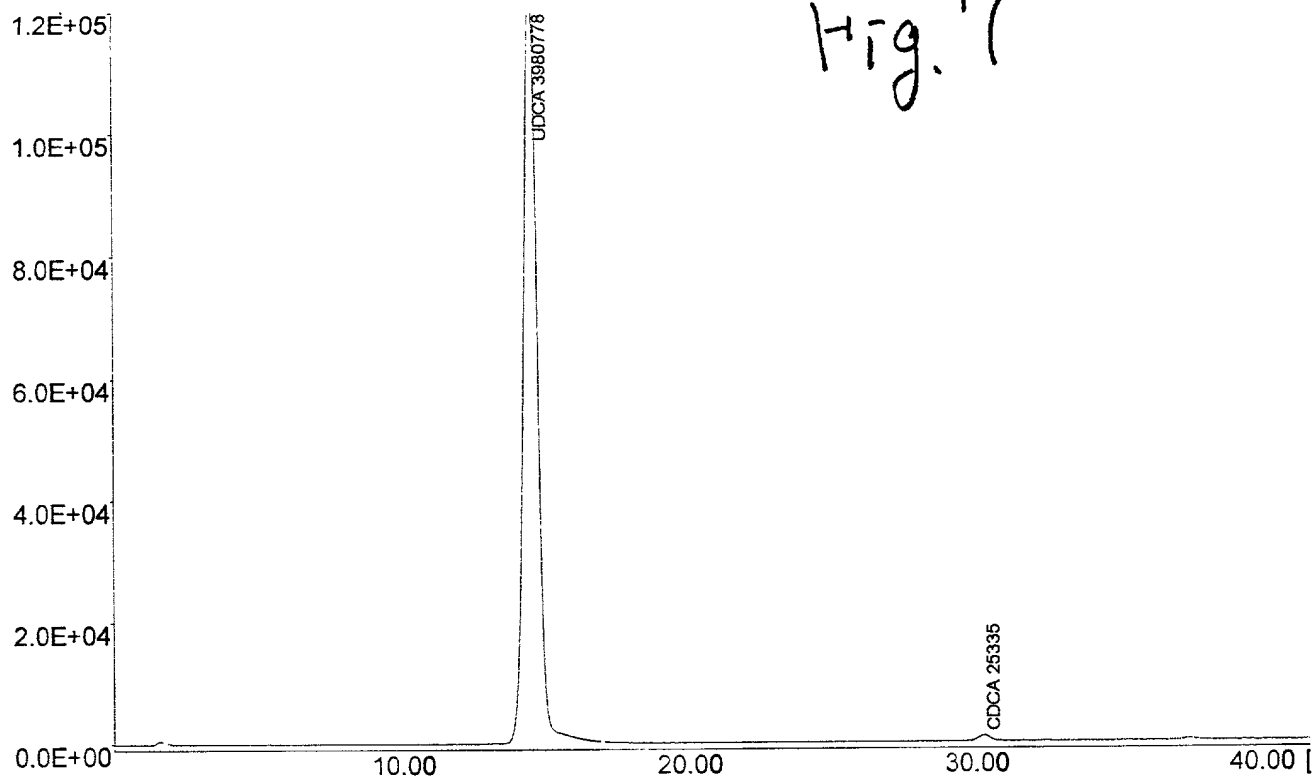
72hrs, after H. pylori treated with UDCA & bismuth citrate
pictured by Transmission Electron Microscope

Fig.6: NMR data for UDCA in the liquid formulation dosage form:

this data shows that this UDCA is absolutely free UDCA



HPLC for UDCA in the liquid formulation dosage form.



File name : USG0726001.CH1

Info :

GG25STAR250UD5---DW EXT

Vial # = 1 Rack # = 1

Injection Date : 26-Jul-2000 16:48:10

Curr. Date : 30-Jan-2001 17:39:30

User : PRIME

Group : DATA

Acquisition Time : 43.85 [min]

Control Method :

Code of system chromatographic : SYSTEM_1

#	Name	RT	Area[.Sec]	%Area
---	------	----	------------	-------

1	UDCA	14.7423980777	50	99.4
---	------	---------------	----	------

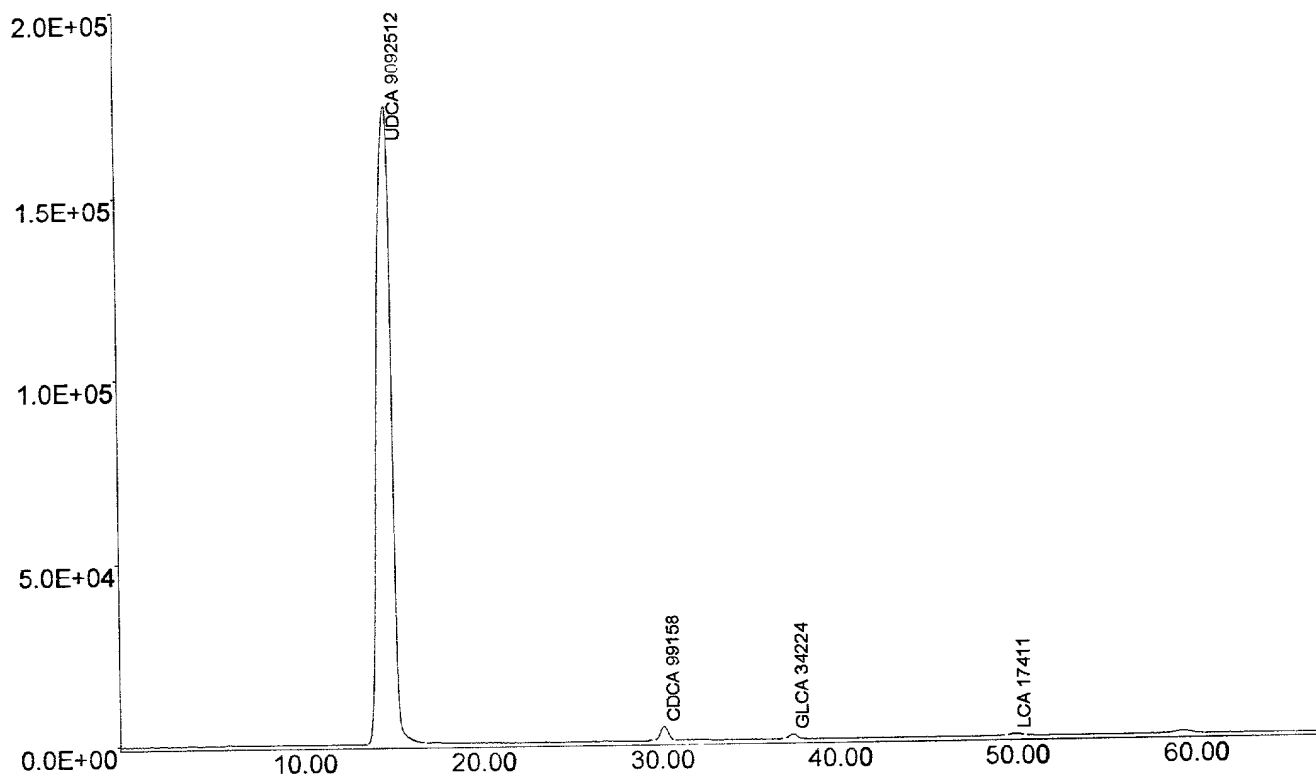
2	CDCA	30.483	25335.25	0.6
---	------	--------	----------	-----

Total Area of Peak = 4006112.75 [Sec]

Injection Volume = 10.00 ul

HPLC for standard UDCA

Fig. 8



File name : UDCA724003.CH1

Info :

UDCA 500mg/100ml in MeOH

Vial # = 3 Rack # = 1

Injection Date : 24-Jul-2000 17:20:10

Curr. Date : 30-Jan-2001 17:56:14

User : PRIME

Group : DATA

Acquisition Time : 70.00 [min]

Control Method :

Code of system chromatographic : SYSTEM_1

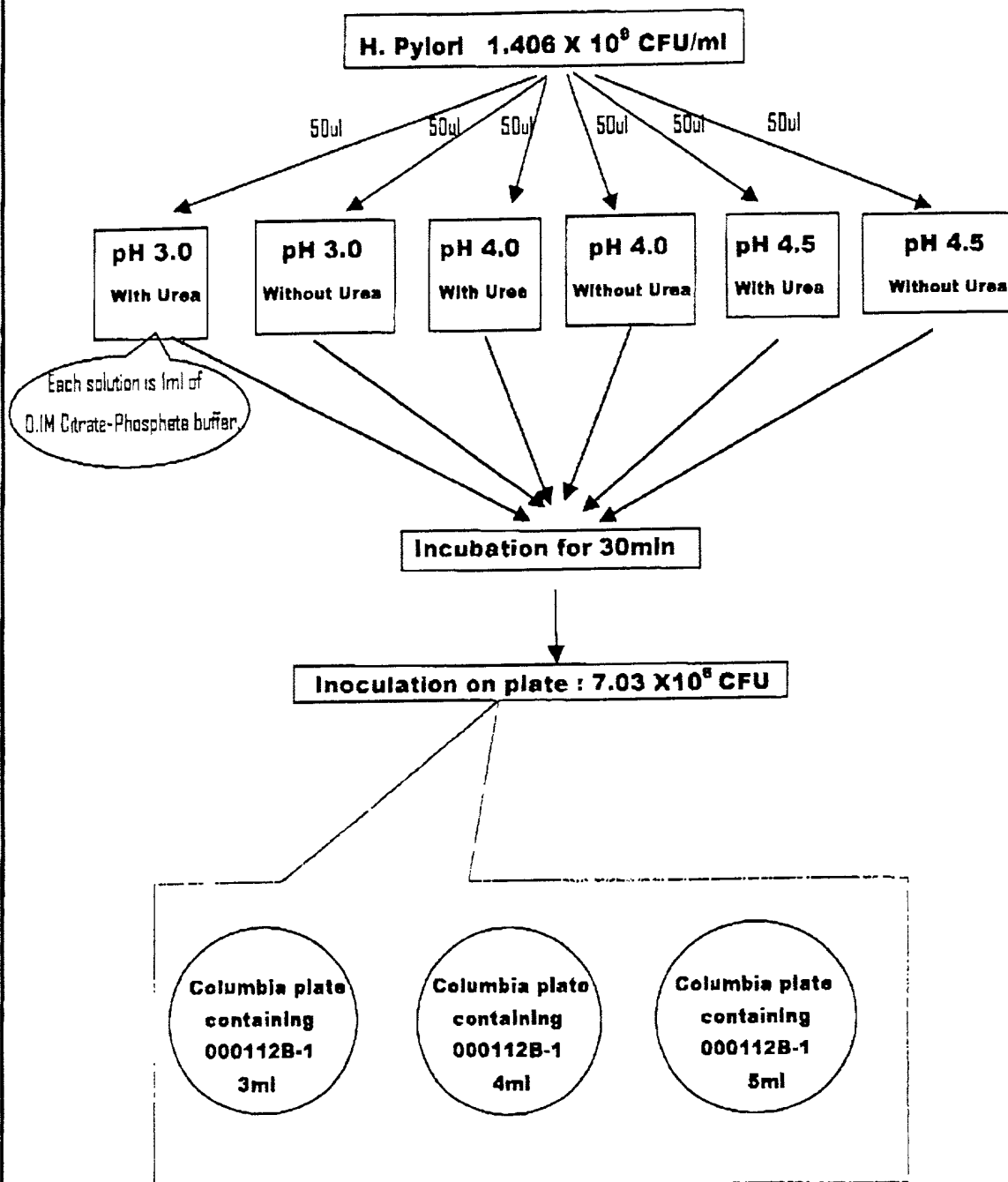
#	Name	RT	Area[.Sec]	%Area
1	UDCA	15.1679092512.25	98.4	
2	CDCA	30.442 99157.50	1.1	
3	GLCA	37.675 34224.00	0.4	
4	LCA	50.167 17410.75	0.2	

Total Area of Peak = 9243304.50 [.Sec]

Injection Volume = 10.00 ul

◀ Abstracted diagram for the culture method ▶

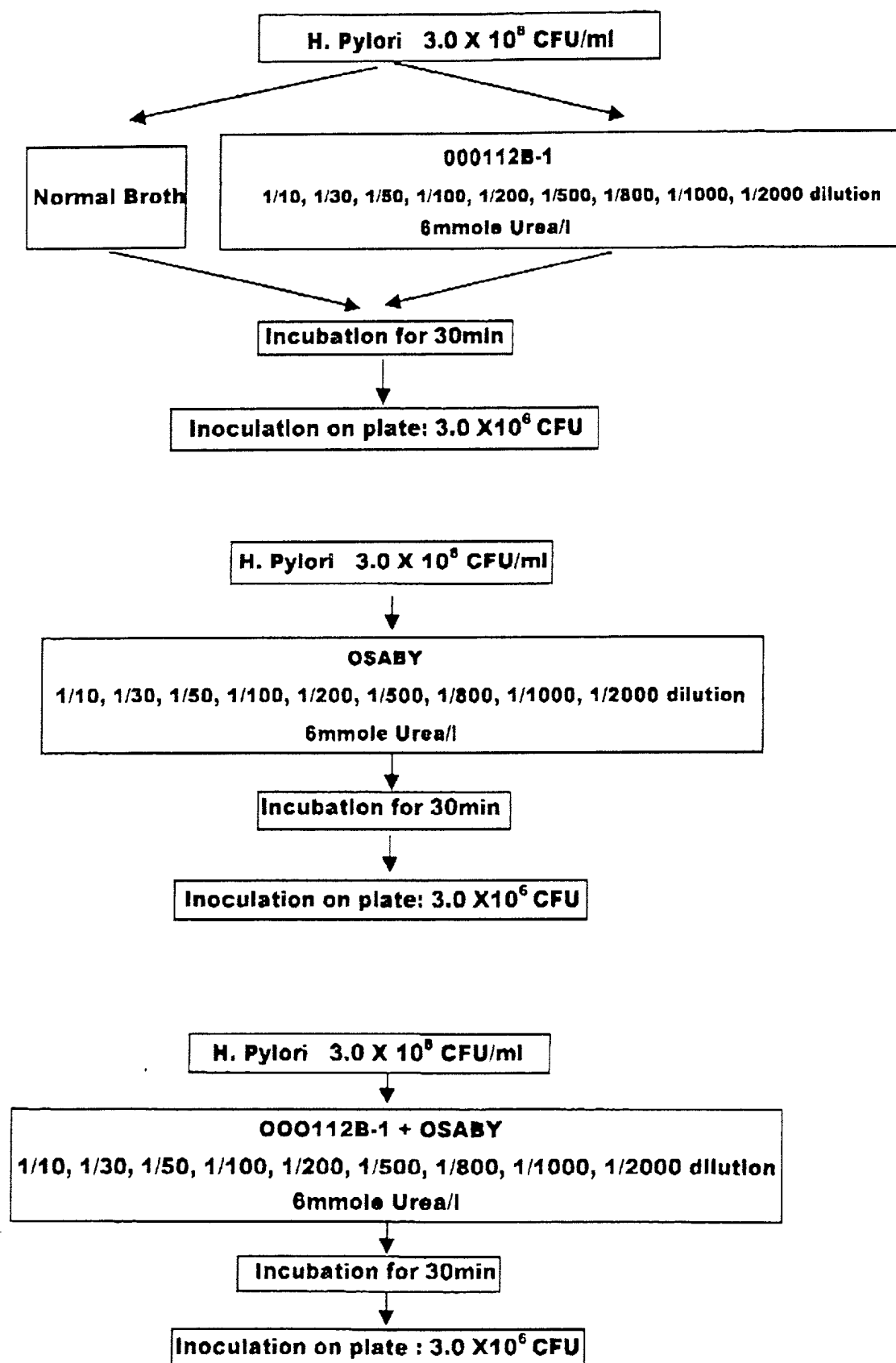
(i) Method with the various pH values.



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 9

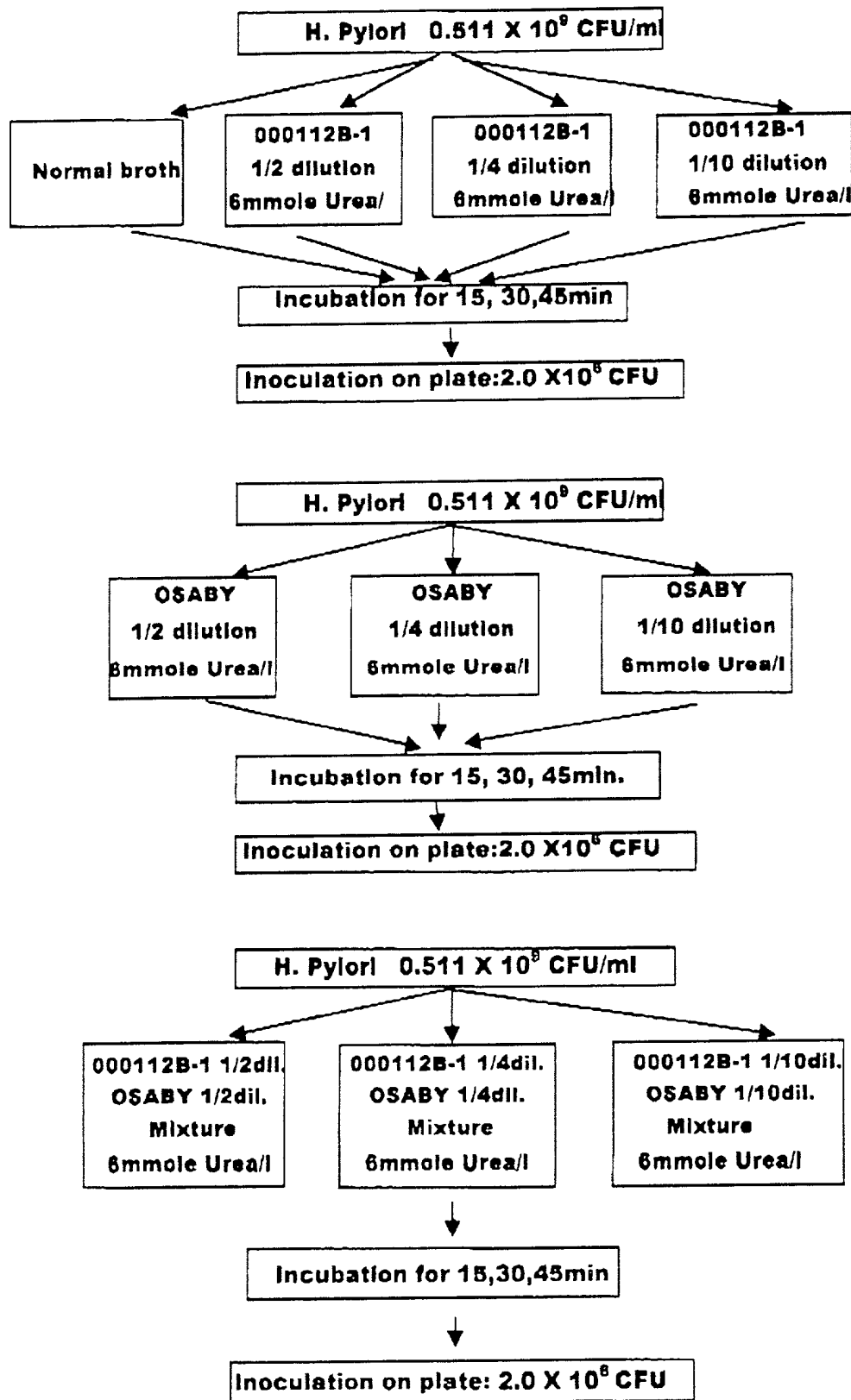
(ii) Method with the various concentrations.



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 10

(iii) Method with the various concentrations
+ various incubation time



Plates were incubated microaerophilically at 37°C for 72 hours.

Figure 11